AN ANALYSIS OF BICYCLE/MOTOR VEHICLE COLLISIONS REPORTED IN MANITOBA

JANUARY 1 - DECEMBER 31, 1983

This Analysis includes 306 reported Bicycle/Motor Vehicle Collisions, 278 of which produced 279 injuries and 1 fatality. Included is one accident which involved two bikes in collision with a single motor vehicle, two tricycle accidents, and two "two-on-a-bike" accidents.

	1981	1982	1983	% Change From 1982
Number of Accidents (Including Fatalities)	271	292	306	+ 4.8%
Number of Injuries	234	264	279	+ 5.7%
Number of Fatalities	8	1	1	--
Combined Property Damage (Estimated)		$63,282.00		

PREPARED BY:

Province of Manitoba
Department of Highways and Transportation
Motor Vehicle Branch
1075 Portage Avenue
Winnipeg, Manitoba
R3G 0S1

LOCATION OF ACCIDENTS:

Urban: (297)

Winnipeg	- 247	Grand Beach	- 1
Brandon	- 18	Lynn Lake	- 1
Selkirk	- 6	Morden	- 1
Thompson	- 5	Neepawa	- 1
Boissevain	- 2	Niverville	- 1
Flin Flon	- 2	Oakbank	- 1
The Pas	- 2	Portage la Prairie	- 1
Cross Lake	- 1	Steinbach	- 1
Carberry	- 1	Stonewall	- 1
Dauphin	- 1	Tyndall	- 1
Gimli	- 1	Wasagaming	- 1

Rural: (9)

North of Main Street (north of Sand Plant), Selkirk	- 1
P.T.H. #15, ¼ mile west of Dugald	- 1
P.R. #204, #44 and Henderson Highway	- 1
P.T.H. #5, 1½ mile west of Dauphin	- 1
P.T.H. #9, 2 miles north of Camp Morton	- 1
Hole River	- 1
P.R. #202, near intersection of Rebeck Road	- 1
P.T.H. #30, near Altona	- 1
Dog Creek Reserve Road	- 1

PERSONAL INJURIES:

	1981	1982	1983
Slight injury to cyclist	175	209	235
Serious injury to cyclist	59	55	44
Fatal	8	1	1
Not injured	22	26	23
Unknown	9	6	6

NOTE: Injuries include one accident which involved two bikes in collision with a single motor vehicle and two "two-on-a-bike" accidents.

ACCIDENTS (By Month):

	1981	1982	1983		1981	1982	1983
January	0	0	0	July	46	47	63
February	1	0	0	August	43	51	52
March	8	1	2	September	37	32	39
April	18	24	35	October	6	24	21
May	52	44	43	November	8	7	4
June	51	61	47	December	1	1	0

AGES OF CYCLISTS:

	MALE	FEMALE	TOTAL	%1981	%1982	%1983
Under 4 years	0	0	0	0	.7%	--
4 - 8 years	29	7	36	13.2%	13.7%	11.7%
9 - 12 years	33	19	52	16.9%	21.6%	16.9%
13 - 16 years	58	13	71	23.9%	23.3%	23.1%
17 - 20 years	35	19	54	14.7%	12.0%	17.6%
Over 20 years	57	34	91	28.3%	26.0%	29.6%
Unknown	3	0	3	2.9%	2.7%	1.0%

NOTE: The number of cyclists includes one accident which involved two bikes in collision with a single motor vehicle. The number of cyclists does not include the passengers involved in the two "two-on-a-bike" accidents.

TIME OF DAY:

	TOTAL	%1981	%1982	%1983
12 midnight - 6 a.m.	4	3.7%	1.7%	1.3%
6 a.m. - 12 noon	42	14.0%	17.1%	13.7%
12 noon - 6 p.m.	153	49.4%	53.4%	50.0%
6 p.m. - midnight	107	32.8%	27.7%	35.0%

DARKNESS/DAYLIGHT:

Daylight	262	79.7%	84.2%	85.6%
Darkness	22	13.7%	8.9%	7.2%

DARKNESS/DAYLIGHT: (Cont'd)

	TOTAL	%1981	%1982	%1983
Dawn	2	.7%	1.0%	.7%
Dusk	19	5.9%	5.8%	6.2%
Not Indicated	1	--	--	.3%

NIGHTIME ACCIDENTS:

Lighting Conditions:

Street Lites - 19

Unlit Street/Roads - 3

Bicycle Lighting - 19 Accident Reports gave no description of lighting equipment on the bicycles involved in night-time accidents.

- 3 Reports indicated that the bicycles involved in a night-time accident had no reflectors or lights.

INJURIES RELATED TO NIGHT-TIME ACCIDENTS:

Slight	- 20	Not Injured	- 1
Serious	- 2	Fatal	- 0

NOTE: The number of injuries includes a passenger involved in a "two-on-a-bike" accident.

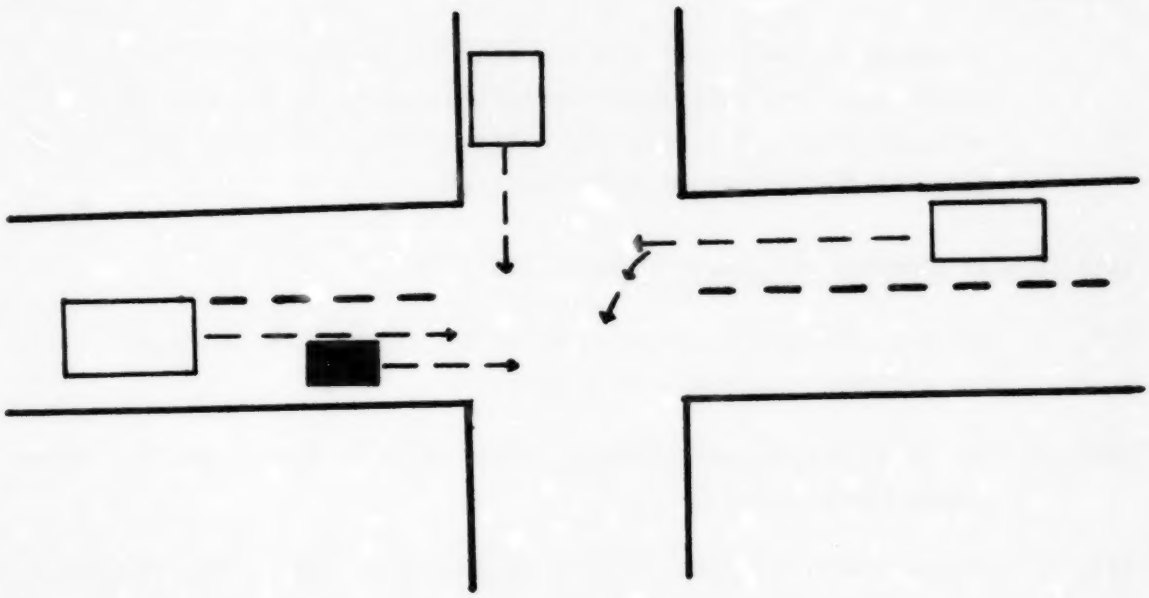
BICYCLE TYPES:

	1981	1982	1983
Multi-Geared (3, 5, 10, or 12 speeds)	145	155	161
Standard Gliders	24	14	15
Tricycle	2	3	2
Tandem Bicycle	1	0	2
No Description	102	123	127

SUMMARY OF ACCIDENT LOCATIONS:

174	(56.9%)	of the recorded accidents occurred at intersections;
107	(35.0%)	of the accidents occurred at roadway locations other than intersections;
15	(4.9%)	of the accidents occurred in backlanes; and
10	(3.3%)	of the accidents occurred in parking lots.

DEFINITIONS AND TERMS OF ACCIDENT TYPES:



In the following commentary we have used certain terms to describe the path of the motor vehicle in comparison to the intended path of the cyclist. In order for the reader to attain a true picture of what actually happened at the accident scene, the reader should understand the following descriptive terms:

"A" The "A" motor vehicle is moving in the same direction as the noted cyclist. In this case, the motor vehicle is described as an "APPROACHING" motor vehicle.

"B" The "B" motor vehicle is moving in a direction that is perpendicular to the path of the cyclist. In this case, the motor vehicle's path

DEFINITIONS AND TERMS OF ACCIDENT TYPES: (Cont'd)

will intersect with the cyclist's path at approximately a 90° angle. The motor vehicle is described as a "PASSING" motor vehicle.

"C" The "C" motor vehicle is moving in a direction that is opposite to the path of the cyclist. In this case, the motor vehicle is described as an "ONCOMING" motor vehicle.

FATALITIES:

On August 3, 1983, a 79 year old Winnipeg man was struck by a passing motor vehicle while attempting to make a left turn at an intersection on a red light. Sixteen days later he died from injuries sustained in the accident.

THIS IS WHAT HAPPENED AT INTERSECTIONS: (174)

(29) Cyclists rode through stop signs or red lights without stopping. One accident resulted in a fatality.

(26) Cyclists collided with oncoming motor vehicles which made left turns across their paths.

(17) Cyclists were "pinched off" and knocked down by vehicles travelling in the same direction, making right turns across their paths.

(15) Cyclists operating on sidewalks, collided with motor vehicles:

- 4 - collided with motor vehicles exiting backlanes;
- 4 - cyclists entered roadways before it was safe to do so;
- 4 - collided with motor vehicles that made right turns across their paths;
- 1 - collided with a motor vehicle stopped at a stop sign;
- 1 - collided with a motor vehicle exiting a garage; and
- 1 - collided with a motor vehicle entering a parking lot.

(13) Cyclists drove from backlanes into the paths of passing motor vehicles.

(10) Cyclists were struck by passing motor vehicles that failed to stop for red lights.

THIS IS WHAT HAPPENED AT INTERSECTIONS: (Cont'd)

(9) Cyclists collided with passing motor vehicles that were attempting to pull away from stop signs after stopping.

(8) Cyclists made left turns into the paths of oncoming motor vehicles.

(6) Cyclists were struck by passing motor vehicles that failed to stop for stop signs. One accident involved "two-on-a-bike".

(5) Cyclists were struck by passing motor vehicles in crosswalks. In two cases, the bicycles were being walked, while in the other three cases, the bicycles were being ridden.

(4) Cyclists were struck by passing motor vehicles that made left turns across their paths.

(4) Cyclists attempting to pull away from stop signs after stopping collided with passing motor vehicles.

(4) Cyclists were struck from behind by approaching motor vehicles.

(4) Cyclists were struck by passing motor vehicles that made right turns across their paths.

(3) Accident reports contained insufficient information to actually determine what happened.

(3) Cyclists swerved left into paths of approaching motor vehicles.

(3) Cyclists collided with passing motor vehicles when cyclists attempted to make left turns.

(2) Cyclists failed to clear intersections before the traffic lights turned "red" and collided with passing motor vehicles.

(2) Cyclists were struck by passing motor vehicles that failed to grant the right-of-way at yield signs.

(2) Cyclists collided with passing motor vehicles that were exiting backlanes.

THIS IS WHAT HAPPENED AT INTERSECTIONS: (Cont'd)

(1) Cyclist collided "head-on" with a motor vehicle.

(1) Cyclist collided with the rear of a stopped motor vehicle.

(1) Cyclist struck the opening door of a stopped motor vehicle.

(1) Cyclist was struck by a passing motor vehicle in a pedestrian corridor.

(1) Cyclist was struck by a motor vehicle that was in collision with a second motor vehicle.

THIS IS WHAT HAPPENED AT ROADWAY LOCATIONS OTHER THAN INTERSECTIONS: (107)

(17) Cyclists were struck from behind by approaching motor vehicles.

(17) Cyclists collided with passing motor vehicles as they entered roadways from a variety of locations:

6 - cyclists entered roads from private driveways;
4 - cyclists entered roads from sidewalks;
3 - cyclists entered roads from between parked cars;
3 - cyclists entered roads from parking lots; and
1 - cyclist's point of entry is unknown.

(13) Cyclists swerved left into the paths of approaching motor vehicles. One accident involved "two-on-a-bike".

(12) Cyclists struck the opening doors of parked motor vehicles.

(8) Cyclists were sideswiped or squeezed into the curb, while being passed by vehicles in their same lane.

(8) Cyclists struck the rear of motor vehicles. In seven cases, the motor vehicles were parked, while in one case, the motor vehicle was stopped.

(6) Cyclists were involved in accidents while operating on sidewalks. Four cyclists were struck by motor vehicles exiting parking lots. One

THIS IS WHAT HAPPENED AT ROADWAY LOCATIONS OTHER THAN INTERSECTIONS: (Cont'd)

cyclist lost control of his bicycle and struck a motor vehicle parked in a private driveway. Another cyclist was struck by a motor vehicle entering a parking spot.

(5) Cyclists operating on the wrong side of the roads attempted to change lanes to the right and collided with approaching motor vehicles.

(4) Cyclists were "pinched off" and knocked down by vehicles travelling in the same direction, making right turns across their paths.

(4) Cyclists collided with motor vehicles that were exiting parking spots.

(4) Accident reports contained insufficient information to actually determine what happened.

(2) Cyclists were struck by motor vehicles travelling in the same direction that suddenly swerved left across cyclists' paths.

(2) Cyclists made left turns into the paths of oncoming motor vehicles.

(2) Cyclists collided "head-on" with oncoming motor vehicles.

(1) Cyclist was struck by a motor vehicle exiting a private driveway.

(1) Stationary cyclist was struck by a motor vehicle that was reversing from a driveway.

(1) Cyclist fell while walking his bike and was struck by a passing motor vehicle.

THIS IS WHAT HAPPENED IN BACKLANES: (15)

(5) Cyclists collided with passing motor vehicles when they entered backlanes from a variety of locations:

2 - cyclist's points of entry are unknown;
1 - cyclist entered a backlane from a private yard;
1 - cyclist entered a backlane from a private driveway; and
1 - cyclist entered a backlane from a bicycle path.

THIS IS WHAT HAPPENED IN BACKLANES: (Cont'd)

(5) Cyclists collided with passing motor vehicles at the intersections of laneways.

(3) Cyclists collided "head-on" with oncoming motor vehicles. In two cases, the cyclists had just turned corners prior to the collisions.

(1) Cyclist struck the rear of a parked motor vehicle.

(1) Cyclist attempting to cross a laneway was struck by a passing motor vehicle.

THIS IS WHAT HAPPENED IN PARKING LOTS: (10)

(3) Cyclists collided with passing motor vehicles. In one case, the view of the cyclist and motor vehicle operator was blocked by a parked motor vehicle; while in the other case the view was obstructed by a fence and bushes.

(3) Cyclists collided with oncoming motor vehicles.

(2) Cyclists were struck by motor vehicles exiting parking stalls.

(1) Cyclist collided "head-on" with a stopped motor vehicle.

(1) Cyclist struck the rear of a parked motor vehicle. It was reported that the bike did not have any brakes.

APPENDIX:

Supplementary to the reported bicycle/motor vehicle collisions, we have reports of 18 accidents which are not classified as bicycle/motor vehicle collisions, but which occurred in conjunction with the operation of a bicycle. We take the liberty of commenting on these accidents for the benefit of Instructors with the Manitoba Bicycle Safety Training Program.

In the (18) aforementioned accidents, there were 12 individuals slightly injured and 5 individuals seriously injured.

(12) Cyclists lost control of their bicycles and fell down. In six cases, the cyclists lost control when they drove over curbs. Three accident reports contained insufficient information to actually determine what happened. In another two cases, cyclists lost control when they struck poles; in another case the cyclist lost control when he rode through a puddle.

(5) Cyclists struck pedestrians:

- 1 - cyclist struck a pedestrian that stepped onto the roadway from in front of a school bus;
- 1 - cyclist operating on the wrong side of the road, collided with a pedestrian that ran across his path;
- 1 - cyclist rode through a red light and struck a pedestrian that was crossing the roadway;
- 1 - cyclist struck a pedestrian that suddenly stepped onto the roadway. It was reported that the brakes did not work; and
- 1 - accident report contained insufficient information to actually determine what happened.

(1) Accident occurred when a cyclist was in collision with another cyclist. A cyclist attempting to pull over to the side of the roadway, struck the rear tire of another cyclist travelling in the same direction.